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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,822	04/02/2001	Shinichi Baba	04900.00001	8088

22907 7590 01/23/2006

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WASHINGTON, DC 20001

EXAMINER

JONES, PRENELL P

ART UNIT	PAPER NUMBER
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2668

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,822

Applicant(s)

BABA ET AL.

Examiner

Prenell P. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 15 and 22-37 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 and 16-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-8, 15 and 22-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments that the combined cited art of Ioannidis et al, Wang et al and Sarkar et al fail to teach or suggest a soft handoff that transmits data to a first base station, wherein the first base station retransmits data to a second base station using IP-in-IP encapsulation with respect to claims 1-8, 15 and 22-37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

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35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corson et al (US PG PUB 2004/0125795) in view of Ioannidis et al (Non-Patent Literature/SIGCOMM Computer Communication Review).

Regarding claims 1, 2, 15 and 22, Corson discloses in a telecom routing system that utilizes a soft handover process (paragraph 0021, 0082-87), wherein the architecture includes a mobile in communication with multiple BS (mobile serviceable by both first/second base station), whereby there exist CDMA soft handover from one (a first BS) to another BS (a second BS) (paragraph 0026,), whereas during the handover process a tunneling mechanism/IP-in-IP encapsulation tunneling is provided whereby data packets arriving at a first BS are forwarded/retransmitted to a second BS (paragraph 0054-0061). Corson is silent on de-capsulation of data. In analogous art, Ioannidis discloses IP-based protocols for mobile internetworking wherein IP-in-IP encapsulation and de-capsulation scheme is utilized, (page 242, left column thru page 244, left column) wherein a learning feature is used which enables the MSS to encapsulate and stripping/de-encapsulate IP data packets. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement utilizing IP tunneling de-encapsulation in a mobile communication system as taught by Ioannidis mobile system with the teachings of Corson mobile system

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for the purpose of further providing reliable routing and communicating coherent information between stations (end-to-end).

Regarding claims 3-8 and 23-35, as indicated above, Corson discloses IP-in-IP encapsulation in a telecom routing system that communicates packet information between base stations and mobiles, and the utilization of a CDMA soft handover process. Corson is silent on removing the header. However, Ioannidis further discloses routing (page 242, right column thru page 244, right column) the MSS stripping/de-capsulate headers, thereby creating new headers that are routed with respect to forwarding strategies between a plurality of selected mobile hosts. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement utilizing removing the header as taught by Ioannidis with the teachings of Corson for the purpose of further routing and communicating coherent data information.

Regarding claims 36 and 37, as indicated above, Corson discloses in a telecom routing system that utilizes a soft handover process (paragraph 0021, 0082-87), wherein the architecture includes a mobile in communication with multiple BS (mobile serviceable by both first/second base station), whereby there exist CDMA soft handover from one (a first BS) to another BS (a second BS) (paragraph 0026,), whereas during the handover process a tunneling mechanism/IP-in-IP encapsulation tunneling is provided whereby data packets

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arriving at a first BS are forwarded/retransmitted to a second BS (paragraph 0054-0061).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

January 19, 2006


CHI PHAM
SUPERVISORY PATENT EXAMINER
01/20/06